

**MATERIAL SAFETY DATA SHEET**

IDENTITY (As Used on Label and List)  
**CHROMIUM ETCH 1020AC**  
 Chromium Etch 8002-A

<b>Section I</b>		
<b>Manufacturers Name</b> TRANSENE COMPANY INC.	<b>Emergency Telephone Number</b> CHEMTREC 24HR# 1-800-424-9300	
<b>Address</b> 10 ELECTRONICS AVENUE	<b>Telephone Number for Information</b> (978)777-7860 fax: (978)739-5640 www.transene.com	
DANVERS MA 01923	<b>Date Prepared</b> March 2002	

<b>Section II - Hazardous Ingredients / Identity Information</b>	
<b>Other Limits</b>	
<b>Hazardous Components (Specific Chemical Identity Common Name(s)) OSHA PEL ACG1H TLV Recommended % (optional)</b>	
CERIC AMMONIUM NITRATE CAS# 16774-21-3 oral rat LD <sub>50</sub> 244ppm * 10-20	
ACETIC ACID CAS# 64-19-7 2ppm 5-10	
NON-HAZARDOUS AQUEOUS SOLUTION	

**Section III - Physical/Chemical Characteristics**

<b>Boiling Point (100°C)</b>	212°F	<b>Specific Gravity (H<sub>2</sub>O=1) @ 25°C</b>	1.16
<b>Vapor Pressure (mm Hg.)</b>	N/A	<b>Melting Point</b>	N/A
<b>Vapor Density (AIR = 1)</b>	N/A	<b>% VOLATILES:</b>	85
		<b>Evaporation Rate (Butyl Acetate = 1)</b>	Similar to water

**Solubility in Water:** COMPLETE  
**Appearance and Odor:** ORANGE LIQUID WITH VINEGAR ODOR.

**Section IV - Fire and Explosion Hazard Data**

<b>Flash Point (Method Used)</b> NON- FLAMMABLE	<b>Flammable Limits</b>	LEL	UEL
	N/A	---	---

**Extinguishing Media:** WATER SPRAY IN CASE OF FIRE CAUSED BY SPILLAGE. DO NOT USE ORGANIC FIRE EXTINGUISHING AGENTS.

**Special Fire Fighting Procedures:** WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS AND APPROPRIATE PROTECTIVE APPAREL

**Unusual Fire and Explosion Hazards:** SPILLAGE MAY CAUSE FIRE OR LIBERATE DANGEROUS GAS.

INCREASES FLAMMABILITY OF COMBUSTIBLE ORGANICS AND DEADLY OXIDIZABLE

MATERIALS. MAY CAUSE IGNITION. AVOID INHALATION OF POISONOUS GASES OF NITROGEN. AVOID CONTACT WITH ORGANIC MATERIAL.

**Section V — Reactivity Data**

**Stability:** Unstable Conditions to Avoid

**Stable X** ORGANIC MATERIALS, STRONG OXIDANTS, HEAT

**Incompatibility (Materials to Avoid):** METALLIC POWDERS, CARBIDES, HYDROGEN SULFIDE AND EASILY OXIDIZED MATERIALS, TURPENTINE, STRONG BASES, REDUCING AGENTS.

**Hazardous Decomposition or Byproducts:**

OXIDES OF NITROGEN, STRONG BASES, AND METALS

**Hazardous Polymerization May Occur Conditions to Avoid**

**Will Not Occur X** EXCESSIVE HEAT

**Section VI- Health Hazard Data**

**Route(s) of Entry: Inhalation? Skin? Ingestion?**

YES YES YES

**Health Hazards (Acute and Chronic)**

MAY CAUSE IRRITATION TO LUNGS AND RESPIRATORY SYSTEM.

**Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?**

NO NO NO

**Signs and Symptoms of Exposure:**

MAY CAUSE IRRITATION AND BURNS.

**Medical Conditions Generally Aggravated by Exposure:**

MAY CAUSE IRRITATION AND BURNS. VAPOR OR SPRAYS CAN BE HAZARDOUS TO THE LUNGS AND RESPIRATORY SYSTEM. MATERIAL IS CORROSIVE TO EYES, SKIN, AND MUCOUS MEMBRANES. CHRONIC EXPOSURE TO VAPORS MAY CAUSE EROSION OF TEETH. MAY CAUSE SEVERE BURNS.

**Emergency and First Aid Procedures:**

EYE CONTACT: IMMEDIATELY GET MEDICAL ATTENTION. FLUSH WITH WATER FOR AT LEAST 15 MINUTES.

SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES. WASH EXPOSED AREA WITH SOAP AND WATER. GET MEDICAL ATTENTION.

INHALATION: REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. SEEK MEDICAL ATTENTION IMMEDIATELY.

INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION! IF VICTIM IS CONSCIOUS, GIVE LARGE QUANTITIES OF WATER

**Section VII - Precautions for Safe Handling and Use**

**Steps to Be Taken in Case Material Is Released or Spilled:**

ISOLATE OR ENCLOSE THE AREA OF SPILL OR LEAK. NEUTRALIZE WITH CALCIUM CARBONATE, WASH WITH EXCESS WATER. PICK UP WITH ABSORBENT MATERIAL (SAND OR VERMICULITE) AND DISPOSE IN A RCRA APPROVED WASTE FACILITY.

**Waste Disposal Method:** CLEAN UP PERSONNEL SHOULD WEAR PROTECTIVE CLOTHING AND RESPIRATORY EQUIPMENT SUITABLE FOR TOXIC FUMES. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE OR FEDERAL ENVIRONMENTAL REGULATIONS.

**Precautions to Be Taken in Handling and Storing:** STORE IN WELL-VENTILATED AREA. ROOM TEMPERATURE STORAGE-SEALED BOTTLES.

**Other Precautions:** STORE AWAY FROM INCOMPATIBLE MATERIALS. PROTECT FROM PHYSICAL DAMAGE AND DIRECT SUNLIGHT.

**Section VIII-Control Measures**

**Respiratory Protection (Specify Type)**

IF TLV IS EXCEEDED WEAR A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS.

**Ventilation: Local Exhaust:** MAINTAIN ADEQUATE VENTILATION

**Mechanical (general):** EXPOSURE TO LIMITS BELOW AIRBORNE EXPOSURE LIMITS

**Special:** EYE BATH AND SHOWER FACILITIES IN WORK AREA.

**Protective Gloves:** RUBBER

**Eye Protection:** CHEMICAL SAFETY GOGGLES OR FACE SHEILD.

**Other Protective Clothing or Equipment:**

PROTECTIVE CLOTHING, RUBBER APRON / USE APPROPRIATE INDUSTRIAL PRACTICES FOR HANDLING ACIDS.

**Work / Hygienic Practices:** USE APPROPRIATE INDUSTRIAL PRACTICES FOR HANDLING ACIDS.